

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/040186 A3

- (51) International Patent Classification⁷: C07H 21/00, C12N 15/65
- (21) International Application Number:
PCT/EP2004/011615
- (22) International Filing Date: 14 October 2004 (14.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03078253.6 14 October 2003 (14.10.2003) EP
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- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
21 July 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR PREPARING A MODIFIED HOST CELL

(57) Abstract: The present invention relates to a method for preparation of a modified host cell which comprises the steps of (a) transfecting a host cell with at least one compound of interest to which a label is covalently coupled and (b) isolating the transfected host cell, wherein the label provides to the host cell a non-inheritable trait. Modified host cells according to the invention can be directly separated from the non-modified host cell. To this end use is made of labels, which can be monitored at the modified cells (such as fluorescent labels) and which enable separation of the modified and non-modified host cells by suitable means. In case of fluorescent labels use can be made of a Fluorescent Activated Cell Sorter. Suitable compounds of interest according to this invention are compounds, which enable to change permanently or transiently a metabolic property of the host cell. Examples of compounds are polynucleotides, proteins or metabolites. The host cells modified according to the present invention can be used for the production of proteins, metabolites and cell biomass.

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